				Start-Finish Date : 20-22.02.2018 Trend/Plunge : Vertical Coordinate.X : 314941 Coordinate.Y : 4704925 Core Diameter : 89,00 mm. Elevation.Z (m) : 330,76 m. D.Rig. Rotary : Hydraulic / Boring Depth Rotary : 30.00 m. Casing Depth : 30.00 m. Groundwater : 9.50 m				BOREHOLE NO: BH-VSK-15 (Page 1 / 2)								
SİSTEM ZEMİN MÜH. İNŞ. TİC.LTD.ŞTİ. GEORGIA NAMA KHVANI HPP CASCADE PROJECT								Undisturbed Sample : UD Core Sample : K Standart Penetration Test : SPT Pressuremeter Test : PMT Permeabilite Deneyi (Permeability Test) : PRB Packer Test : BST								
Boring Depth (m)	Sample Type	Lugeon	Strength (R)	S (Spacing)	UCS (Mpa)	E(Gpa)	N30 Graph	TCR %	SCR %	RQD %	Weathering	Groundwater level	Z (m)	Profile	Prepared by Dilara BAŞOĞUL Geological Engineer	Approved by Emre YILMAZ Geological Eng. M. Sc.
							0 2550								DESCRIPTION:	
0	K														0.00-12.00 m.	
1	K														DILUVIAL, COLLUVIAL and TERRACE deposits	
2	K														River Gravels with Sand and blocky rock fragments	
3	K														Subrounded-rounded	
4	K															
5	K															
6	K															
7	K															
8	K															
9	K															
10	K															
11	K															
12	K			S2				96	31	26	W3				12.00-30.00 m.	
13	K			S2				100	13	-	W4				LAVA BRECCIA and ANDESITE	
14	K														PORPHYRITE Dark brown to dark grey	
15	K															
Spacing S1 Ext.close spacing S2 Very close spacing S3 Close spacing S4 Moderately spacing S5 Widely spacing S6 Very Widely spacing S7 Ext. Widely spacing		Strength Classification (R0)<1 Mpa Ext. Weak Rock (R1)1-5 Mpa Very Weak Rock (R2)5-25 Mpa Weak Rock (R3)25-50 Mpa Medium Rock (R4)50-100 Mpa Strong Rock (R5)100-250 Mpa Very Strong Rock (R6)>250 Mpa Ext.Strong Rock		Lugeon (Conductivity) <1 Low 1-5 Moderate 5-25 High >25 Very High		Rock Quality Designation 0-25 Very Poor 25-50 Poor 50-75 Fair 75-90 Good 90-100 Excellent		Weathering (W) W1 Fresh W2 Slightly Weathered W3 Mod. Weathered W4 Highly Weathered W5 Comp. Weathered								

Boring Depth (m)	Sample Type	Lugeon	Strength (R)	S (Spacing)	UCS (Mpa)	E(Gpa)	N30 Graph	TCR %	SCR %	RQD %	Weathering	Groundwater level	Z (m)	Profile	Prepared by Dilara BAŞOĞUL Geological Engineer	Approved by Emre YILMAZ Geological Eng. M. Sc.
															DESCRIPTION:	
15															12,00-30.00 m. LAVA BRECCIA and ANDESITE PORPHYRITE Dark brown to dark grey Slightly Weathered - Moderately Weathered (W2-W3) Weak Rock R2 Very Poor to Poor Rock Quality Very Closely Spaced (S2-S3)	
16	K			S3				100	64	35	W3					
17	K		R2	S4	17.7	4.4		93	79	71	W2					
18																
19	K			S4				100	95	88	W2					
20	K			S3				100	76	54	W2					
21																
22	K			S3				97	79	45	W2					
23	K			S2				97	25	22	W3					
24																
25	K			S3				100	42	33	W3					
26	K			S3				100	63	46	W3					
27																
28	K			S2				99	38	18	W4					
29	K			S2				99	36	23	W3					
30																

Spacing
S1 Ext.close spacing
S2 Very close spacing
S3 Close spacing
S4 Moderately spacing
S5 Widely spacing
S6 Very Widely spacing
S7 Ext. Widely spacing

Strength Classification
(R0)<1 Mpa Ext. Weak Rock
(R1)1-5 Mpa Very Weak Rock
(R2)5-25 Mpa Weak Rock
(R3)25-50 Mpa Medium Rock
(R4)50-100 Mpa Strong Rock
(R5)100-250 Mpa Very Strong Rock
(R6)>250 Mpa Ext.Strong Rock

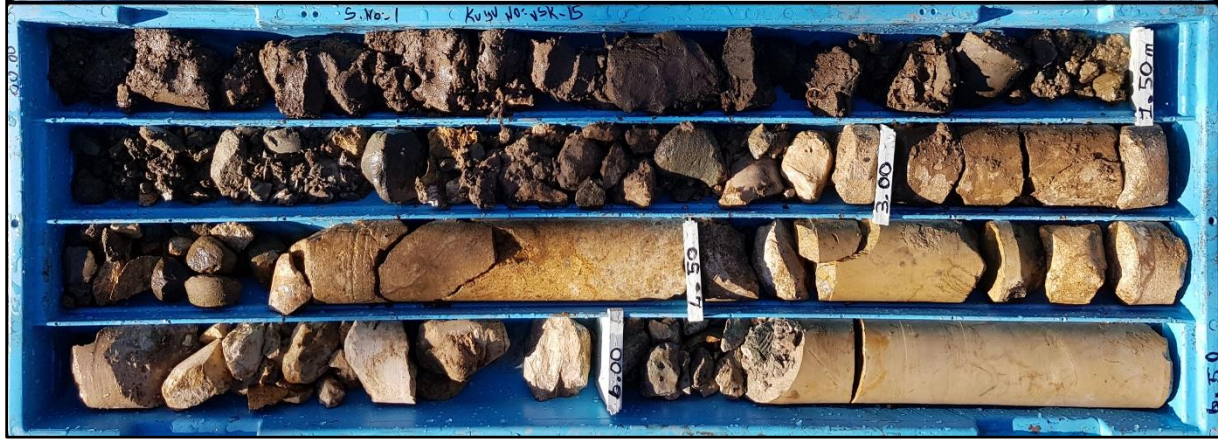
Lugeon (Conductivity)
<1 Low
1-5 Moderate
5-25 High
>25 Very High

Rock Quality Designation
0-25 Very Poor
25-50 Poor
50-75 Fair
75-90 Good
90-100 Good

Weathering (W)
W1 Fresh
W2 Slightly Weathered
W3 Mod. Weathered
W4 Highly Weathered
W5 Comp. Weathered

PROJECT NAME	GEORGIA NAMAKHVANI HPP CASCADE PROJECT		
CONTRACTOR	ENKA	SUBCONTRACTOR	sistemzemin
	ENKA İNŞAAT SANAYİ A.Ş.		SİSTEM ZEMİN MÜH. İNŞ. TIC.LTD.ŞTİ.
BOREHOLE NO	VSK-15	COREBOX NO	1-7
DATE DRILLED	20.02-22.02.2018	DEPTH (M)	0.00-6.50



0 **1 m.**





PROJECT NAME	GEORGIA NAMAKHVANI HPP CASCADE PROJECT		
CONTRACTOR	ENKA	SUBCONTRACTOR	sistemzemin
	ENKA İNŞAAT SANAYİ A.Ş.		SİSTEM ZEMİN MÜH. İNŞ. TIC.LTD.ŞTİ.
BOREHOLE NO	VSK-15	COREBOX NO	2-7
DATE DRILLED	20.02-22.02.2018	DEPTH (M)	6.50-12.50

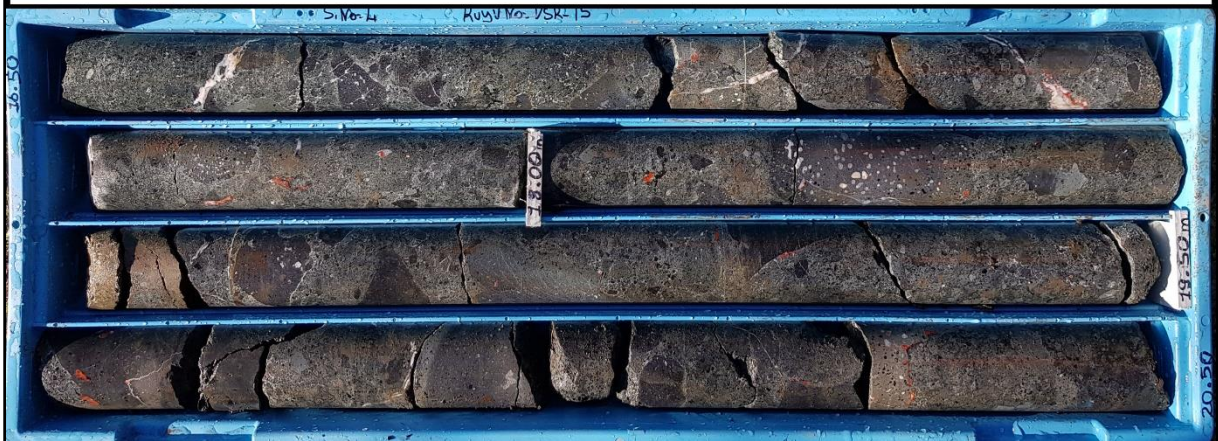
0 **1 m.**


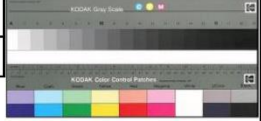


PROJECT NAME	GEORGIA NAMAKHVANI HPP CASCADE PROJECT		
CONTRACTOR	ENKA	SUBCONTRACTOR	
	ENKA İNŞAAT SANAYİ A.Ş.		SİSTEM ZEMİN MÜH. İNŞ. TIC.LTD.ŞTİ.
BOREHOLE NO	VSK-15	COREBOX NO	3-7
DATE DRILLED	20.02-22.02.2018	DEPTH (M)	12.50-16.50
			
0			1 m.





PROJECT NAME	GEORGIA NAMAKHVANI HPP CASCADE PROJECT		
CONTRACTOR	ENKA	SUBCONTRACTOR	
	ENKA İNŞAAT SANAYİ A.Ş.		SİSTEM ZEMİN MÜH. İNŞ. TIC.LTD.ŞTİ.
BOREHOLE NO	VSK-15	COREBOX NO	4-7
DATE DRILLED	20.02-22.02.2018	DEPTH (M)	16.50-20.50
			
0			1 m.






PROJECT NAME	GEORGIA NAMAKHVANI HPP CASCADE PROJECT		
CONTRACTOR	ENKA	SUBCONTRACTOR	
	ENKA İNŞAAT SANAYİ A.Ş.		SİSTEM ZEMİN MÜH. İNŞ. TIC.LTD.ŞTİ.
BOREHOLE NO	VSK-15	COREBOX NO	5-7
DATE DRILLED	20.02-22.02.2018	DEPTH (M)	20.50-24.50
			
			1 m.



PROJECT NAME	GEORGIA NAMAKHVANI HPP CASCADE PROJECT		
CONTRACTOR	ENKA	SUBCONTRACTOR	
	ENKA İNŞAAT SANAYİ A.Ş.		SİSTEM ZEMİN MÜH. İNŞ. TIC.LTD.ŞTİ.
BOREHOLE NO	VSK-15	COREBOX NO	6-7
DATE DRILLED	20.02-22.02.2018	DEPTH (M)	24.50-28.50
			
			1 m.



PROJECT NAME	GEORGIA NAMAKHVANI HPP CASCADE PROJECT		
CONTRACTOR	ENKA	SUBCONTRACTOR	
	ENKA İNŞAAT SANAYİ A.Ş.		SİSTEM ZEMİN MÜH. İNŞ. TIC.LTD.ŞTİ.
BOREHOLE NO	VSK-15	COREBOX NO	7-7
DATE DRILLED	20.02-22.02.2018	DEPTH (M)	28.50-30.00
0			
			1 m.
